



RAW SEQUENCE LISTING ERROR REPORT

10/509247

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/509,247
Source: PCT
Date Processed by STIC: 10/4/2004

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE: SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):
U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04

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Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 10/509,247

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing
- 6 PatentIn 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO: X (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS (Do not insert any subheadings under this heading!)
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: X (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES" response to include the skipped sequences
- 8 Skipped Sequences (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
<210> sequence id number
<400> sequence id number
000
- 9 Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents
- 10 Invalid <213> Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) 14, 16, 18, 20 missing the <220> "Feature" and ~~sequence identifiers~~
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 09/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n/Xaa "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid

AMC - Biotechnology Systems Branch - 09/09/2003

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PCT

RAW SEQUENCE LISTING

DATE: 10/04/2004

PATENT APPLICATION: US/10/509,247

TIME: 11:24:28

Input Set : A:\P023P01Sequence Listing-2.txt

Output Set: N:\CRF4\10042004\J509247.raw

3 <110> APPLICANT: Japan Science and Technology Corporation
 5 <120> TITLE OF INVENTION: Therapeutic drug containing drug components expressed and fused
 6 with proteins composing nano-particles
 8 <130> FILE REFERENCE: P023P01
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/509,247
 C--> 10 <141> CURRENT FILING DATE: 2004-09-28
 10 <150> PRIOR APPLICATION NUMBER: JP 2002-097280
 W--> 11 <151> PRIOR FILING DATE: 2002-3-29
 13 <160> NUMBER OF SEQ ID NOS: 20
 15 <170> SOFTWARE: PatentIn Ver. 2.1

Does Not Comply
 Corrected Diskette Needed

(pg. 1, 4-5, 7)

ERRORED SEQUENCES

355 <210> SEQ ID NO: 14
 356 <211> LENGTH: 658
 357 <212> TYPE: PRT
 358 <213> ORGANISM: Artificial Sequence
 W--> 359 <220> FEATURE: - pls insert this mandatory numeric identifier
 359 <223> OTHER INFORMATION: Description of Artificial Sequence: GFP protein fused with
 HBsAg L protein

OK> 362 <400> SEQUENCE: 14
 363 Met Arg Ser Leu Leu Ile Leu Val Leu Cys Phe Leu Pro Leu Ala Ala
 364 1 5 10 15
 365 Leu Gly Lys Val Arg Gln Gly Met Gly Thr Asn Leu Ser Val Pro Asn
 366 20 25 30
 367 Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro Ala Phe Gly Ala
 368 35 40 45
 369 Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn Lys Asp Gln Trp
 370 50 55 60
 371 Pro Glu Ala Asn Gln Val Gly Ala Gly Ala Phe Gly Pro Gly Phe Thr
 372 65 70 75 80
 373 Pro Pro His Gly Gly Leu Leu Gly Trp Ser Pro Gln Ala Gln Gly Ile
 374 85 90 95
 375 Leu Thr Thr Val Pro Ala Ala Pro Pro Ala Ser Thr Asn Arg Gln
 376 100 105 110
 377 Ser Gly Arg Gln Pro Thr Pro Ile Ser Pro Pro Leu Arg Asp Ser His
 378 115 120 125
 379 Pro Gln Ala Met Gln Trp Asn Ser Thr Thr Phe His Gln Ala Leu Leu
 380 130 135 140
 381 Asp Pro Arg Val Arg Gly Leu Tyr Phe Pro Ala Gly Gly Ser Ser Ser
 382 145 150 155 160
 383 Gly Thr Val Asn Pro Val Pro Thr Thr Ala Ser Pro Ile Ser Gly Asp

↖ pls
 see
 item # 11
 ON error
 Summary
 Sheet.

384

165

170

175

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DATE: 10/04/2004

PATENT APPLICATION: US/10/509,247

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Input Set : A:\P023P01Sequence Listing-2.txt

Output Set: N:\CRF4\10042004\J509247.raw

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385 Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu
386          180          185          190
387 Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile
388          195          200          205
389 Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly
390          210          215          220
391 Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His
392 225          230          235          240
393 Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys
394          245          250          255
395 Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile
396          260          265          270
397 Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro
398          275          280          285
399 Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys
400          290          295          300
401 Thr Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr
402 305          310          315          320
403 Lys Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp
404          325          330          335
405 Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp
406          340          345          350
407 Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro
408          355          360          365
409 Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser
410          370          375          380
411 Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe
412 385          390          395          400
413 Cys Leu Trp Val Tyr Ile Asp Tyr Lys Asp Asp Asp Asp Lys Ile Pro
414          405          410          415
415 Val Ala Thr Met Val Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val
416          420          425          430
417 Pro Ile Leu Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser
418          435          440          445
419 Val Ser Gly Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu
420          450          455          460
421 Lys Phe Ile Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu
422 465          470          475          480
423 Val Thr Thr Leu Thr Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp
424          485          490          495
425 His Met Lys Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr
426          500          505          510
427 Val Gln Glu Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr
428          515          520          525
429 Arg Ala Glu Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu
430          530          535          540
431 Leu Lys Gly Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys
432 545          550          555          560
433 Leu Glu Tyr Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys

```

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Input Set : A:\P023P01Sequence Listing-2.txt

Output Set: N:\CRF4\10042004\J509247.raw

```

434          565          570          575
435 Gln Lys Asn Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu
436          580          585          590
437 Asp Gly Ser Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile
438          595          600          605
439 Gly Asp Gly Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln
440          610          615          620
441 Ser Ala Leu Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu
442 625          630          635          640
443 Leu Glu Phe Val Thr Ala Ala Gly Ile Thr Leu Gly Met Asp Glu Leu
444          645          650          655
445 Tyr Lys

```

616 <210> SEQ ID NO: 16

617 <211> LENGTH: 590

618 <212> TYPE: PRT

619 <213> ORGANISM: Artificial Sequence

W--> 620 <220> FEATURE: *PLS insert this mandatory numeric identifier.*

620 <223> OTHER INFORMATION: Description of Artificial Sequence: IFN?? protein fused with

HBsAg L protein

OK 622 <400> SEQUENCE: 16

```

623 Met Arg Ser Leu Leu Ile Leu Val Leu Cys Phe Leu Pro Leu Ala Ala
624 1          5          10          15
625 Leu Gly Lys Val Arg Gln Gly Met Gly Thr Asn Leu Ser Val Pro Asn
626          20          25          30
627 Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro Ala Phe Gly Ala
628          35          40          45
629 Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn Lys Asp Gln Trp
630          50          55          60
631 Pro Glu Ala Asn Gln Val Gly Ala Gly Ala Phe Gly Pro Gly Phe Thr
632 65          70          75          80
633 Pro Pro His Gly Gly Leu Leu Gly Trp Ser Pro Gln Ala Gln Gly Ile
634          85          90          95
635 Leu Thr Thr Val Pro Ala Ala Pro Pro Pro Ala Ser Thr Asn Arg Gln
636          100          105          110
637 Ser Gly Arg Gln Pro Thr Pro Ile Ser Pro Pro Leu Arg Asp Ser His
638          115          120          125
639 Pro Gln Ala Met Gln Trp Asn Ser Thr Thr Phe His Gln Ala Leu Leu
640          130          135          140
641 Asp Pro Arg Val Arg Gly Leu Tyr Phe Pro Ala Gly Gly Ser Ser Ser
642 145          150          155          160
643 Gly Thr Val Asn Pro Val Pro Thr Thr Ala Ser Pro Ile Ser Gly Asp
644          165          170          175
645 Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu
646          180          185          190
647 Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile
648          195          200          205
649 Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly
650          210          215          220
651 Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His
652 225          230          235          240

```

*↑ PLS
see item
11
ON error
Summary
Sheet.*

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Input Set : A:\P023P01Sequence Listing-2.txt

Output Set: N:\CRF4\10042004\J509247.raw

```

653 Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys
654                245                250                255
655 Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile
656                260                265                270
657 Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro
658                275                280                285
659 Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys
660                290                295                300
661 Thr Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr
662 305                310                315                320
663 Lys Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp
664                325                330                335
665 Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp
666                340                345                350
667 Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro
668                355                360                365
669 Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser
670                370                375                380
671 Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe
672 385                390                395                400
673 Cys Leu Trp Val Tyr Ile Asp Tyr Lys Asp Asp Asp Asp Lys Ile Pro
674                405                410                415
675 Val Gly Cys Asp Leu Pro Gln Asn His Gly Leu Leu Ser Arg Asn Thr
676                420                425                430
677 Leu Val Leu Leu His Gln Met Arg Arg Ile Ser Pro Phe Leu Cys Leu
678                435                440                445
679 Lys Asp Arg Arg Asp Phe Arg Phe Pro Gln Glu Met Val Lys Gly Ser
680                450                455                460
681 Gln Leu Gln Lys Ala His Val Met Ser Val Leu His Glu Met Leu Gln
682 465                470                475                480
683 Gln Ile Phe Ser Leu Phe His Thr Glu Arg Ser Ser Ala Ala Trp Asn
684                485                490                495
685 Met Thr Leu Leu Asp Gln Leu His Thr Gly Leu His Gln Gln Leu Gln
686                500                505                510
687 His Leu Glu Thr Cys Leu Leu Gln Val Val Gly Glu Gly Glu Ser Ala
688                515                520                525
689 Gly Ala Ile Ser Ser Pro Ala Leu Thr Leu Arg Arg Tyr Phe Gln Gly
690                530                535                540
691 Ile Arg Val Tyr Leu Lys Glu Lys Lys Tyr Ser Asp Cys Ala Trp Glu
692 545                550                555                560
693 Val Val Arg Met Glu Ile Met Lys Ser Leu Phe Leu Ser Thr Asn Met
694                565                570                575
695 Gln Glu Arg Leu Arg Ser Lys Asp Arg Asp Leu Gly Ser Ser
696                580                585                590

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862 <210> SEQ ID NO: 18

863 <211> LENGTH: 582

864 <212> TYPE: PRT

865 <213> ORGANISM: Artificial Sequence

W--> 866 <220> FEATURE: - Same error

RAW SEQUENCE LISTING

DATE: 10/04/2004

PATENT APPLICATION: US/10/509,247

TIME: 11:24:28

Input Set : A:\P023P01Sequence Listing-2.txt

Output Set: N:\CRF4\10042004\J509247.raw

866 <223> OTHER INFORMATION: Description of Artificial Sequence: IFN?? protein fused with
 HBSag L protein

OK 872 <400> SEQUENCE: 18

```

873 Met Arg Ser Leu Leu Ile Leu Val Leu Cys Phe Leu Pro Leu Ala Ala
874   1           5           10           15
875 Leu Gly Lys Val Arg Gln Gly Met Gly Thr Asn Leu Ser Val Pro Asn
876           20           25           30
877 Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro Ala Phe Gly Ala
878           35           40           45
879 Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn Lys Asp Gln Trp
880           50           55           60
881 Pro Glu Ala Asn Gln Val Gly Ala Gly Ala Phe Gly Pro Gly Phe Thr
882           65           70           75           80
883 Pro Pro His Gly Gly Leu Leu Gly Trp Ser Pro Gln Ala Gln Gly Ile
884           85           90           95
885 Leu Thr Thr Val Pro Ala Ala Pro Pro Pro Ala Ser Thr Asn Arg Gln
886           100          105          110
887 Ser Gly Arg Gln Pro Thr Pro Ile Ser Pro Pro Leu Arg Asp Ser His
888           115          120          125
889 Pro Gln Ala Met Gln Trp Asn Ser Thr Thr Phe His Gln Ala Leu Leu
890           130          135          140
891 Asp Pro Arg Val Arg Gly Leu Tyr Phe Pro Ala Gly Gly Ser Ser Ser
892          145          150          155          160
893 Gly Thr Val Asn Pro Val Pro Thr Thr Ala Ser Pro Ile Ser Gly Asp
894           165          170          175
895 Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu
896           180          185          190
897 Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile
898           195          200          205
899 Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly
900           210          215          220
901 Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His
902          225          230          235          240
903 Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys
904           245          250          255
905 Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile
906           260          265          270
907 Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro
908           275          280          285
909 Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys
910           290          295          300
911 Thr Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr
912          305          310          315          320
913 Lys Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp
914           325          330          335
915 Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp
916           340          345          350
917 Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro
918           355          360          365
919 Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser

```


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DATE: 10/04/2004

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TIME: 11:24:28

Input Set : A:\P023P01Sequence Listing-2.txt

Output Set: N:\CRF4\10042004\J509247.raw

```

920      370      375      380
921 Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe
922 385      390      395      400
923 Cys Leu Trp Val Tyr Ile Asp Tyr Lys Asp Asp Asp Asp Lys Ile Pro
924      405      410      415
925 Val Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
926      420      425      430
927 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
928      435      440      445
929 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
930      450      455      460
931 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
932 465      470      475      480
933 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
934      485      490      495
935 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
936      500      505      510
937 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
938      515      520      525
939 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
940      530      535      540
941 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
942 545      550      555      560
943 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
944      565      570      575
945 Thr Gly Tyr Leu Arg Asn
946      580

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1245 <210> SEQ ID NO: 20

1246 <211> LENGTH: 1109

1247 <212> TYPE: PRT

1248 <213> ORGANISM: Artificial Sequence

W--> 1249 <220> FEATURE: SAME ERROR

1249 <223> OTHER INFORMATION: Description of Artificial Sequence: HGF protein fused with HBsAg L protein

OK 1252 <400> SEQUENCE: 20

```

1253 Met Arg Ser Leu Leu Ile Leu Val Leu Cys Phe Leu Pro Leu Ala Ala
1254 1      5      10      15
1255 Leu Gly Lys Val Arg Gln Gly Met Gly Thr Asn Leu Ser Val Pro Asn
1256      20      25      30
1257 Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro Ala Phe Gly Ala
1258      35      40      45
1259 Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn Lys Asp Gln Trp
1260      50      55      60
1261 Pro Glu Ala Asn Gln Val Gly Ala Gly Ala Phe Gly Pro Gly Phe Thr
1262 65      70      75      80
1263 Pro Pro His Gly Gly Leu Leu Gly Trp Ser Pro Gln Ala Gln Gly Ile
1264      85      90      95
1265 Leu Thr Thr Val Pro Ala Ala Pro Pro Pro Ala Ser Thr Asn Arg Gln
1266      100      105      110
1267 Ser Gly Arg Gln Pro Thr Pro Ile Ser Pro Pro Leu Arg Asp Ser His

```

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1268	115	120	125
1269	Pro. Gln Ala Met Gln Trp Asn Ser Thr Thr Phe His Gln Ala Leu Leu		
1270	130	135	140
1271	Asp Pro Arg Val Arg Gly Leu Tyr Phe Pro Ala Gly Gly Ser Ser Ser		
1272	145	150	155
1273	Gly Thr Val Asn Pro Val Pro Thr Thr Ala Ser Pro Ile Ser Gly Asp		
1274	165	170	175
1275	Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu		
1276	180	185	190
1277	Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile		
1278	195	200	205
1279	Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly		
1280	210	215	220
1281	Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His		
1282	225	230	235
1283	Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys		
1284	245	250	255
1285	Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile		
1286	260	265	270
1287	Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro		
1288	275	280	285
1289	Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys		
1290	290	295	300
1291	Thr Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr		
1292	305	310	315
1293	Lys Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp		
1294	325	330	335
1295	Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp		
1296	340	345	350
1297	Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro		
1298	355	360	365
1299	Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser		
1300	370	375	380
1301	Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe		
1302	385	390	395
1303	Cys Leu Trp Val Tyr Ile Asp Tyr Lys Asp Asp Asp Lys Ile Pro		
1304	405	410	415
1305	Val Gln Arg Lys Arg Arg Asn Thr Ile His Glu Phe Lys Lys Ser Ala		
1306	420	425	430
1307	Lys Thr Thr Leu Ile Lys Ile Asp Pro Ala Leu Lys Ile Lys Thr Lys		
1308	435	440	445
1309	Lys Val Asn Thr Ala Asp Gln Cys Ala Asn Arg Cys Thr Arg Asn Lys		
1310	450	455	460
1311	Gly Leu Pro Phe Thr Cys Lys Ala Phe Val Phe Asp Lys Ala Arg Lys		
1312	465	470	475
1313	Gln Cys Leu Trp Phe Pro Phe Asn Ser Met Ser Ser Gly Val Lys Lys		
1314	485	490	495
1315	Glu Phe Gly His Glu Phe Asp Leu Tyr Glu Asn Lys Asp Tyr Ile Arg		
1316	500	505	510

RAW SEQUENCE LISTING

DATE: 10/04/2004

PATENT APPLICATION: US/10/509,247

TIME: 11:24:28

Input Set : A:\P023P01Sequence Listing-2.txt

Output Set: N:\CRF4\10042004\J509247.raw

```

1317 Asn Cys Ile Ile Gly Lys Gly Arg Ser Tyr Lys Gly Thr Val Ser Ile
1318      515      520      525
1319 Thr Lys Ser Gly Ile Lys Cys Gln Pro Trp Ser Ser Met Ile Pro His
1320      530      535      540
1321 Glu His Ser Tyr Arg Gly Lys Asp Leu Gln Glu Asn Tyr Cys Arg Asn
1322 545      550      555      560
1323 Pro Arg Gly Glu Glu Gly Gly Pro Trp Cys Phe Thr Ser Asn Pro Glu
1324      565      570      575
1325 Val Arg Tyr Glu Val Cys Asp Ile Pro Gln Cys Ser Glu Val Glu Cys
1326      580      585      590
1327 Met Thr Cys Asn Gly Glu Ser Tyr Arg Gly Leu Met Asp His Thr Glu
1328      595      600      605
1329 Ser Gly Lys Ile Cys Gln Arg Trp Asp His Gln Thr Pro His Arg His
1330      610      615      620
1331 Lys Phe Leu Pro Glu Arg Tyr Pro Asp Lys Gly Phe Asp Asp Asn Tyr
1332 625      630      635      640
1333 Cys Arg Asn Pro Asp Gly Gln Pro Arg Pro Trp Cys Tyr Thr Leu Asp
1334      645      650      655
1335 Pro His Thr Arg Trp Glu Tyr Cys Ala Ile Lys Thr Cys Ala Asp Asn
1336      660      665      670
1337 Thr Met Asn Asp Thr Asp Val Pro Leu Glu Thr Thr Glu Cys Ile Gln
1338      675      680      685
1339 Gly Gln Gly Glu Gly Tyr Arg Gly Thr Val Asn Thr Ile Trp Asn Gly
1340      690      695      700
1341 Ile Pro Cys Gln Arg Trp Asp Ser Gln Tyr Pro His Glu His Asp Met
1342 705      710      715      720
1343 Thr Pro Glu Asn Phe Lys Cys Lys Asp Leu Arg Glu Asn Tyr Cys Arg
1344      725      730      735
1345 Asn Pro Asp Gly Ser Glu Ser Pro Trp Cys Phe Thr Thr Asp Pro Asn
1346      740      745      750
1347 Ile Arg Val Gly Tyr Cys Ser Gln Ile Pro Asn Cys Asp Met Ser His
1348      755      760      765
1349 Gly Gln Asp Cys Tyr Arg Gly Asn Gly Lys Asn Tyr Met Gly Asn Leu
1350      770      775      780
1351 Ser Gln Thr Arg Ser Gly Leu Thr Cys Ser Met Trp Asp Lys Asn Met
1352 785      790      795      800
1353 Glu Asp Leu His Arg His Ile Phe Trp Glu Pro Asp Ala Ser Lys Leu
1354      805      810      815
1355 Asn Glu Asn Tyr Cys Arg Asn Pro Asp Asp Asp Ala His Gly Pro Trp
1356      820      825      830
1357 Cys Tyr Thr Gly Asn Pro Leu Ile Pro Trp Asp Tyr Cys Pro Ile Ser
1358      835      840      845
1359 Arg Cys Glu Gly Asp Thr Thr Pro Thr Ile Val Asn Leu Asp His Pro
1360      850      855      860
1361 Val Ile Ser Cys Ala Lys Thr Lys Gln Leu Arg Val Val Asn Gly Ile
1362 865      870      875      880
1363 Pro Thr Arg Thr Asn Ile Gly Trp Met Val Ser Leu Arg Tyr Arg Asn
1364      885      890      895
1365 Lys His Ile Cys Gly Gly Ser Leu Ile Lys Glu Ser Trp Val Leu Thr

```

RAW SEQUENCE LISTING

DATE: 10/04/2004

PATENT APPLICATION: US/10/509,247

TIME: 11:24:28

Input Set : A:\P023P01Sequence Listing-2.txt

Output Set: N:\CRF4\10042004\J509247.raw

```

1366          900          905          910
1367 Ala Arg Gln Cys Phe Pro Ser Arg Asp Leu Lys Asp Tyr Glu Ala Trp
1368          915          920          925
1369 Leu Gly Ile His Asp Val His Gly Arg Gly Asp Glu Lys Cys Lys Gln
1370          930          935          940
1371 Val Leu Asn Val Ser Gln Leu Val Tyr Gly Pro Glu Gly Ser Asp Leu
1372 945          950          955          960
1373 Val Leu Met Lys Leu Ala Arg Pro Ala Val Leu Asp Asp Phe Val Ser
1374          965          970          975
1375 Thr Ile Asp Leu Pro Asn Tyr Gly Cys Thr Ile Pro Glu Lys Thr Ser
1376          980          985          990
1377 Cys Ser Val Tyr Gly Trp Gly Tyr Thr Gly Leu Ile Asn Tyr Asp Gly
1378          995          1000          1005
1379 Leu Leu Arg Val Ala His Leu Tyr Ile Met Gly Asn Glu Lys Cys Ser
1380          1010          1015          1020
1381 Gln His His Arg Gly Lys Val Thr Leu Asn Glu Ser Glu Ile Cys Ala
1382 1025          1030          1035          1040
1383 Gly Ala Glu Lys Ile Gly Ser Gly Pro Cys Glu Gly Asp Tyr Gly Gly
1384          1045          1050          1055
1385 Pro Leu Val Cys Glu Gln His Lys Met Arg Met Val Leu Gly Val Ile
1386          1060          1065          1070
1387 Val Pro Gly Arg Gly Cys Ala Ile Pro Asn Arg Pro Gly Ile Phe Val
1388          1075          1080          1085
1389 Arg Val Ala Tyr Tyr Ala Lys Trp Ile His Lys Ile Ile Leu Thr Tyr
1390          1090          1095          1100
1391 Lys Val Pro Gln Ser
1392 1105

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/509,247

DATE: 10/04/2004
TIME: 11:24:29

Input Set : A:\P023P01Sequence Listing-2.txt
Output Set: N:\CRF4\10042004\J509247.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:13; Line(s) 183
Seq#:14; Line(s) 359
Seq#:15; Line(s) 459
Seq#:16; Line(s) 620
Seq#:17; Line(s) 710
Seq#:18; Line(s) 866
Seq#:19; Line(s) 960
Seq#:20; Line(s) 1249

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/509,247

DATE: 10/04/2004

TIME: 11:24:29

Input Set : A:\P023P01Sequence Listing-2.txt

Output Set: N:\CRF4\10042004\J509247.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:11 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD
L:359 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:14
L:362 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:14 ✓
L:620 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:16
L:622 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:16 ✓
L:866 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18
L:872 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:18 ✓
L:1242 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19
L:1249 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:1252 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:20 ✓